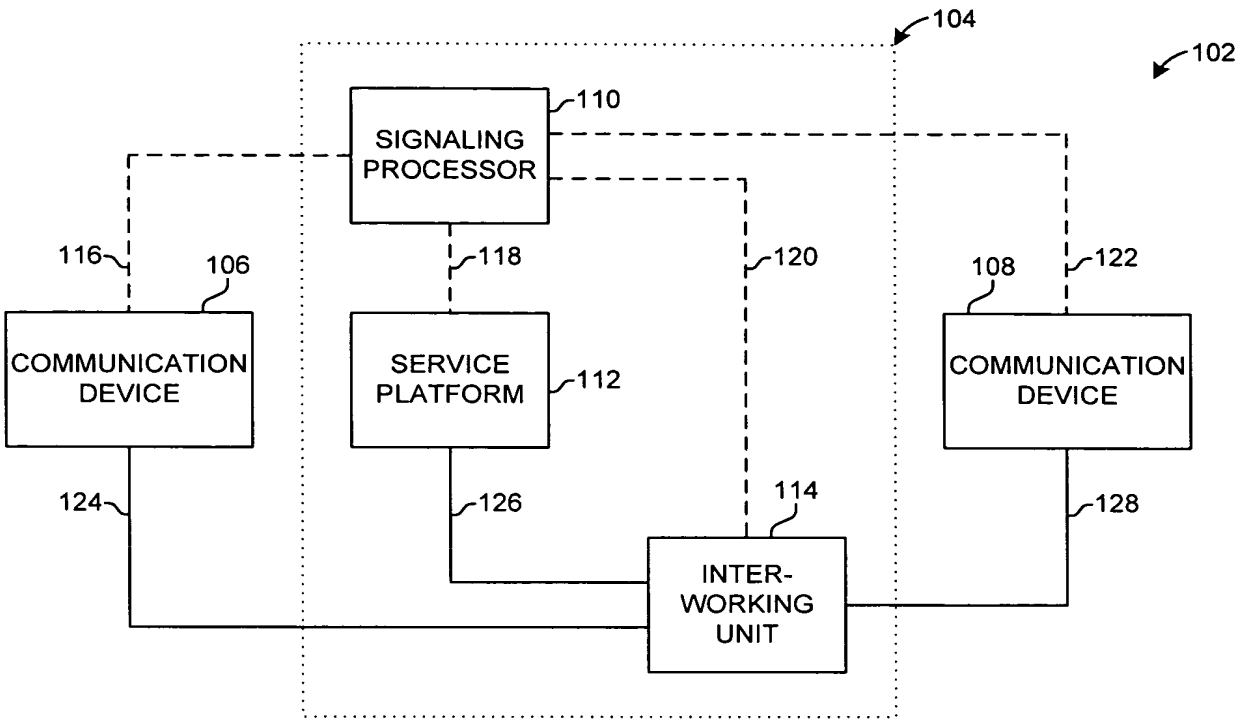
104
102
110
SIGNALING PROCESSOR
116
106
118
120
108
122
COMMUNICATION DEVICE
SERVICE PLATFORM
112
COMMUNICATION DEVICE
124
126
114
128
INTER-WORKING UNIT

FIG. 1

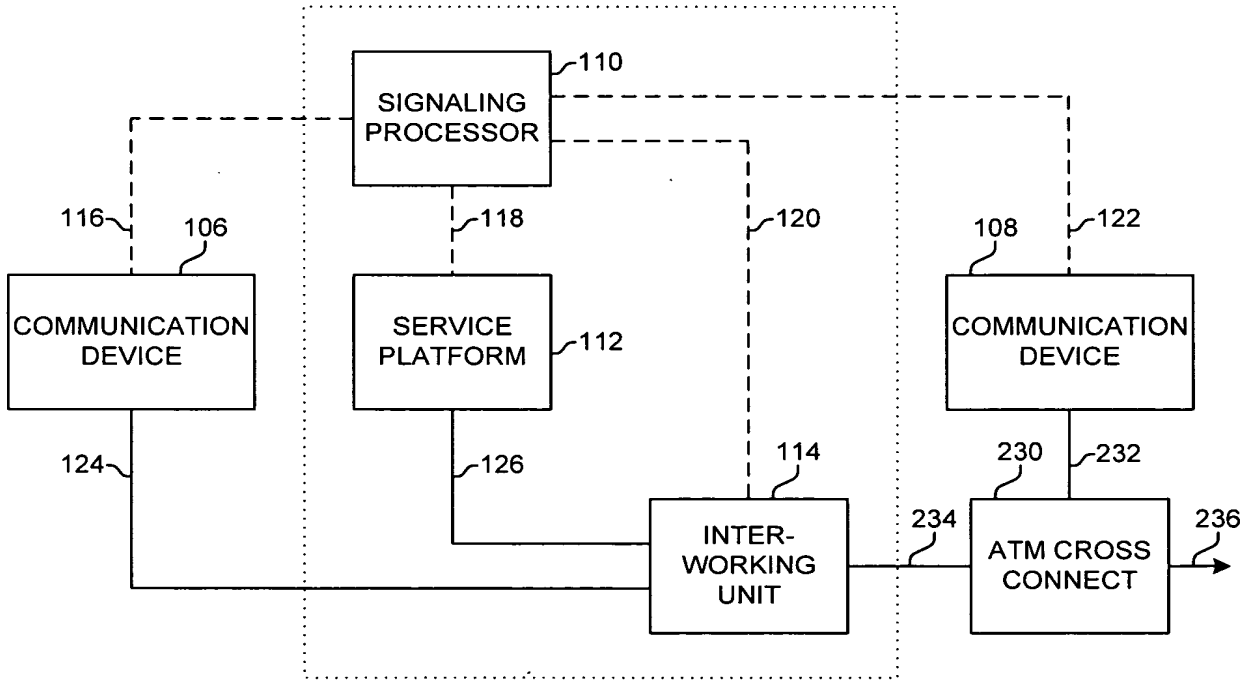
110
SIGNALING PROCESSOR
116
106
118
120
108
122
COMMUNICATION DEVICE
SERVICE PLATFORM
112
COMMUNICATION DEVICE
124
126
114
230
232
234
236
INTER-WORKING UNIT
ATM CROSS CONNECT

FIG. 2

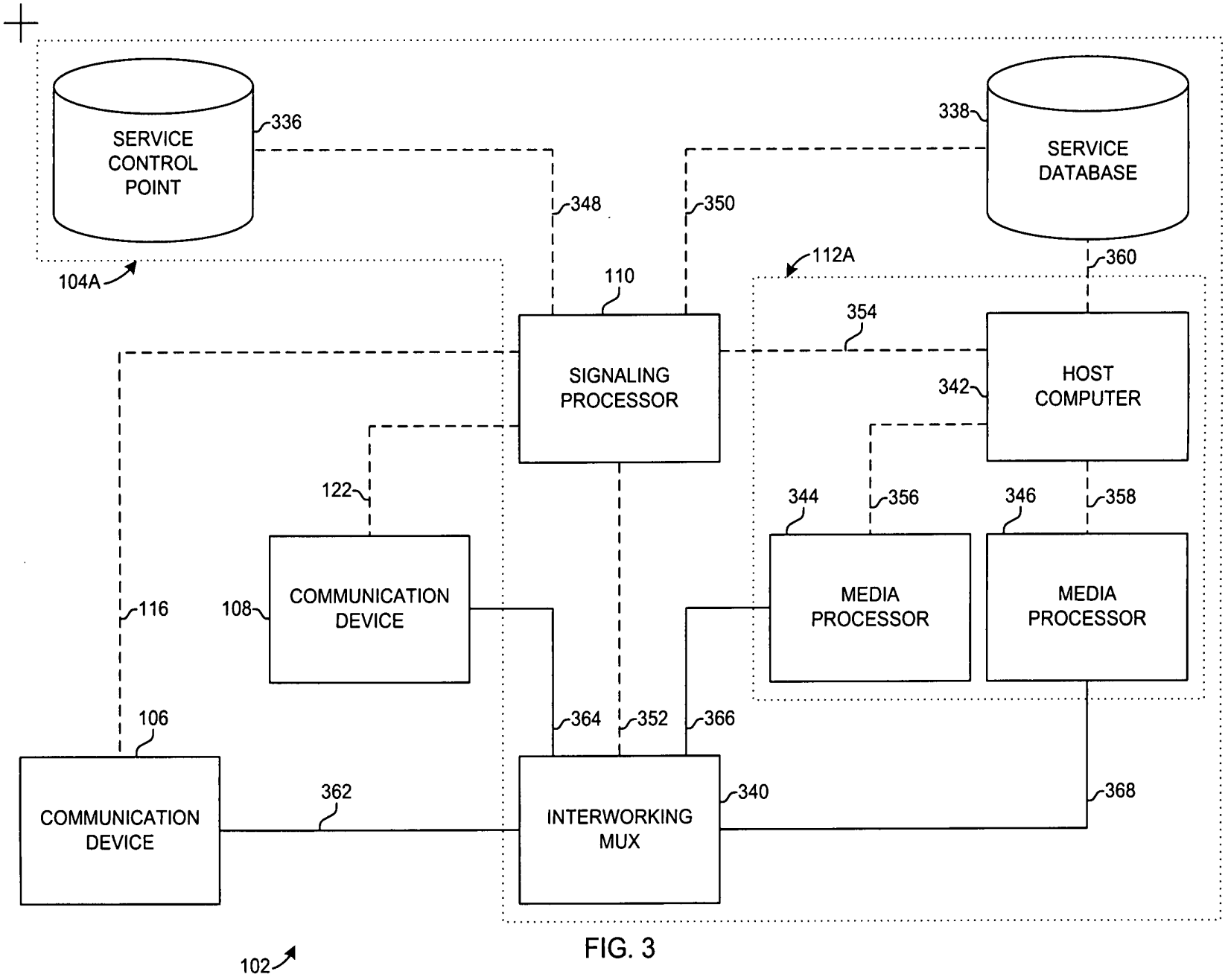
SERVICE CONTROL POINT
336
338
SERVICE DATABASE
348
350
104A
112A
360
110
354
SIGNALING PROCESSOR
342
HOST COMPUTER
122
344
356
346
358
108
COMMUNICATION DEVICE
MEDIA PROCESSOR
MEDIA PROCESSOR
116
106
364
352
366
362
340
368
COMMUNICATION DEVICE
INTERWORKING MUX
102

FIG. 3

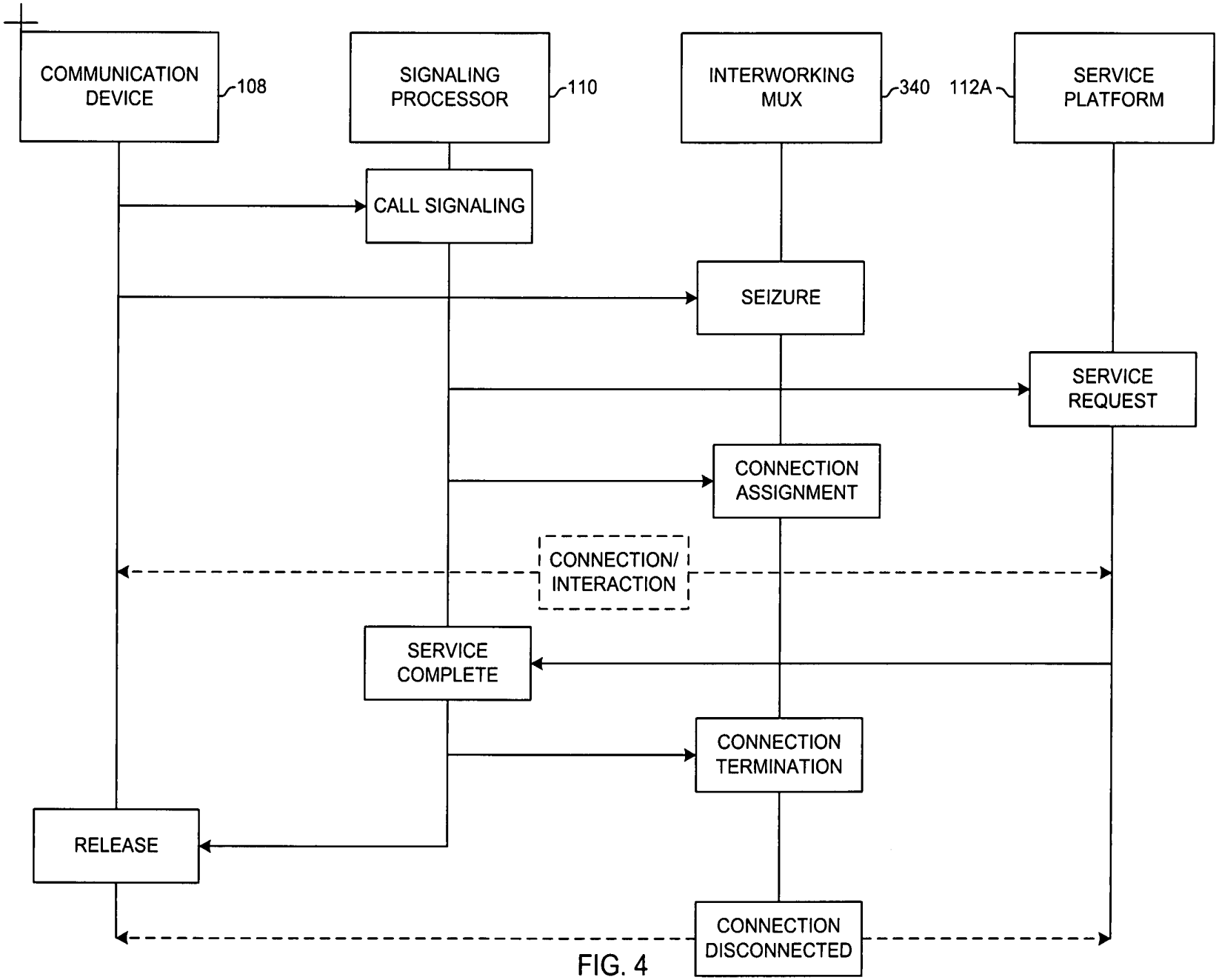
COMMUNICATION DEVICE
108
SIGNALING PROCESSOR
110
INTERWORKING MUX
340
112A
SERVICE PLATFORM
CALL SIGNALING
SEIZURE
SERVICE REQUEST
CONNECTION ASSIGNMENT
CONNECTION/ INTERACTION
SERVICE COMPLETE
CONNECTION TERMINATION
RELEASE
CONNECTION DISCONNECTED

FIG. 4

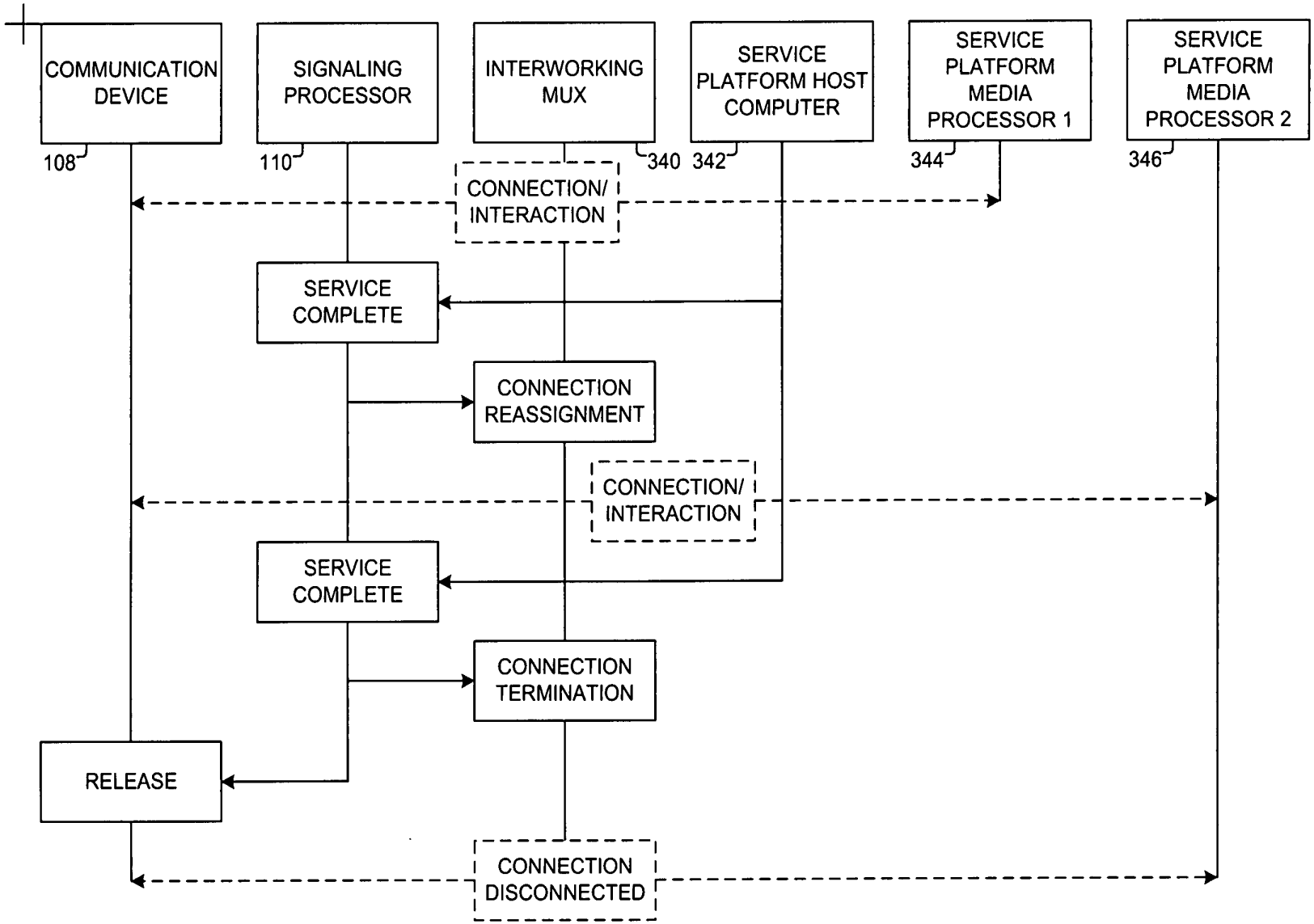
COMMUNICATION DEVICE
108
SIGNALING PROCESSOR
110
INTERWORKING MUX
340
SERVICE PLATFORM HOST COMPUTER
342
SERVICE PLATFORM MEDIA PROCESSOR 1
344
SERVICE PLATFORM MEDIA PROCESSOR 2
346
CONNECTION/ INTERACTION
SERVICE COMPLETE
CONNECTION REASSIGNMENT
CONNECTION/ INTERACTION
SERVICE COMPLETE
CONNECTION TERMINATION
RELEASE
CONNECTION DISCONNECTED

FIG. 5

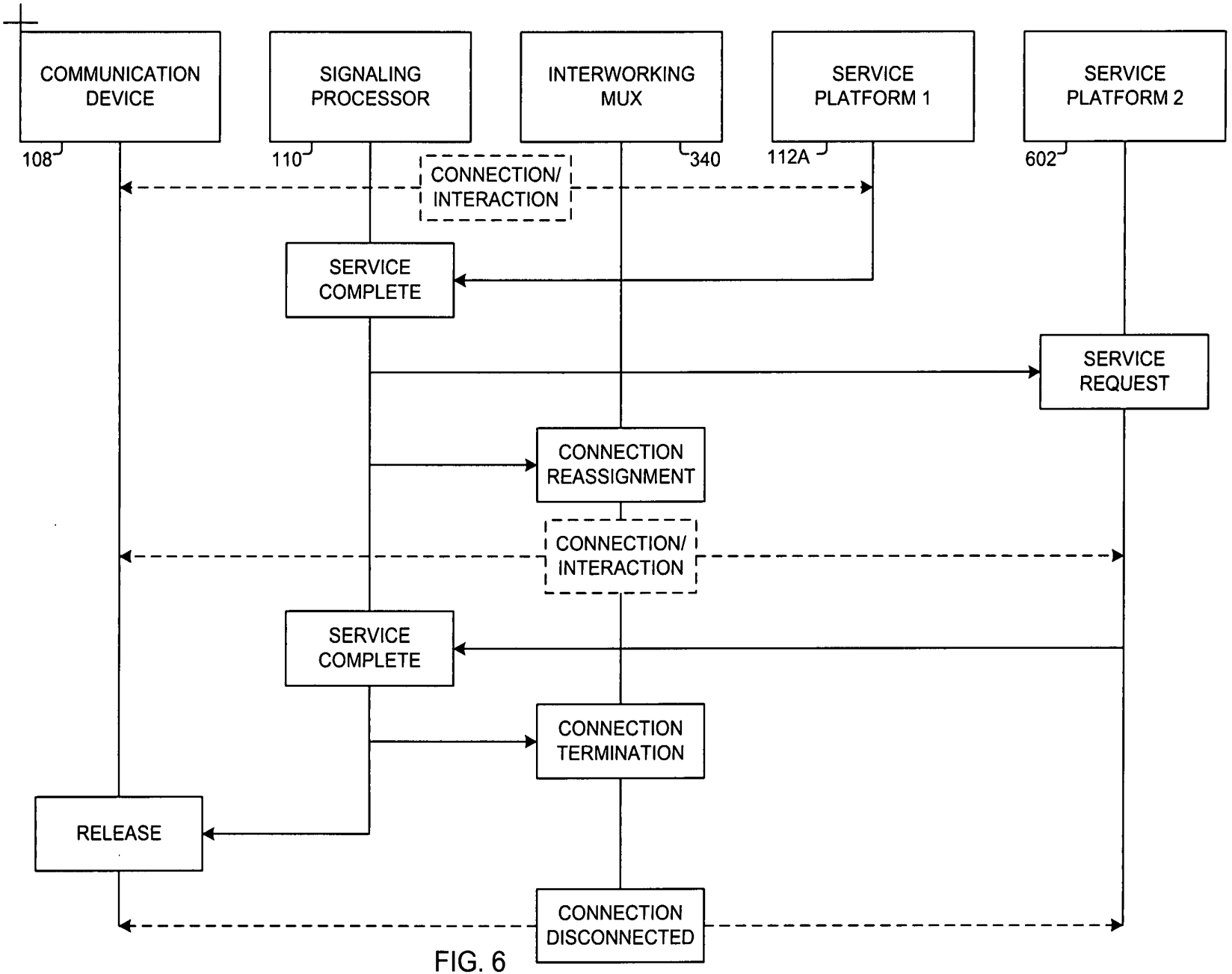
COMMUNICATION DEVICE
SIGNALING PROCESSOR
INTERWORKING MUX
SERVICE PLATFORM 1
SERVICE PLATFORM 2
108
110
340
112A
602
CONNECTION/ INTERACTION
SERVICE COMPLETE
SERVICE REQUEST
CONNECTION REASSIGNMENT
CONNECTION/ INTERACTION
SERVICE COMPLETE
CONNECTION TERMINATION
RELEASE
CONNECTION DISCONNECTED

FIG. 6

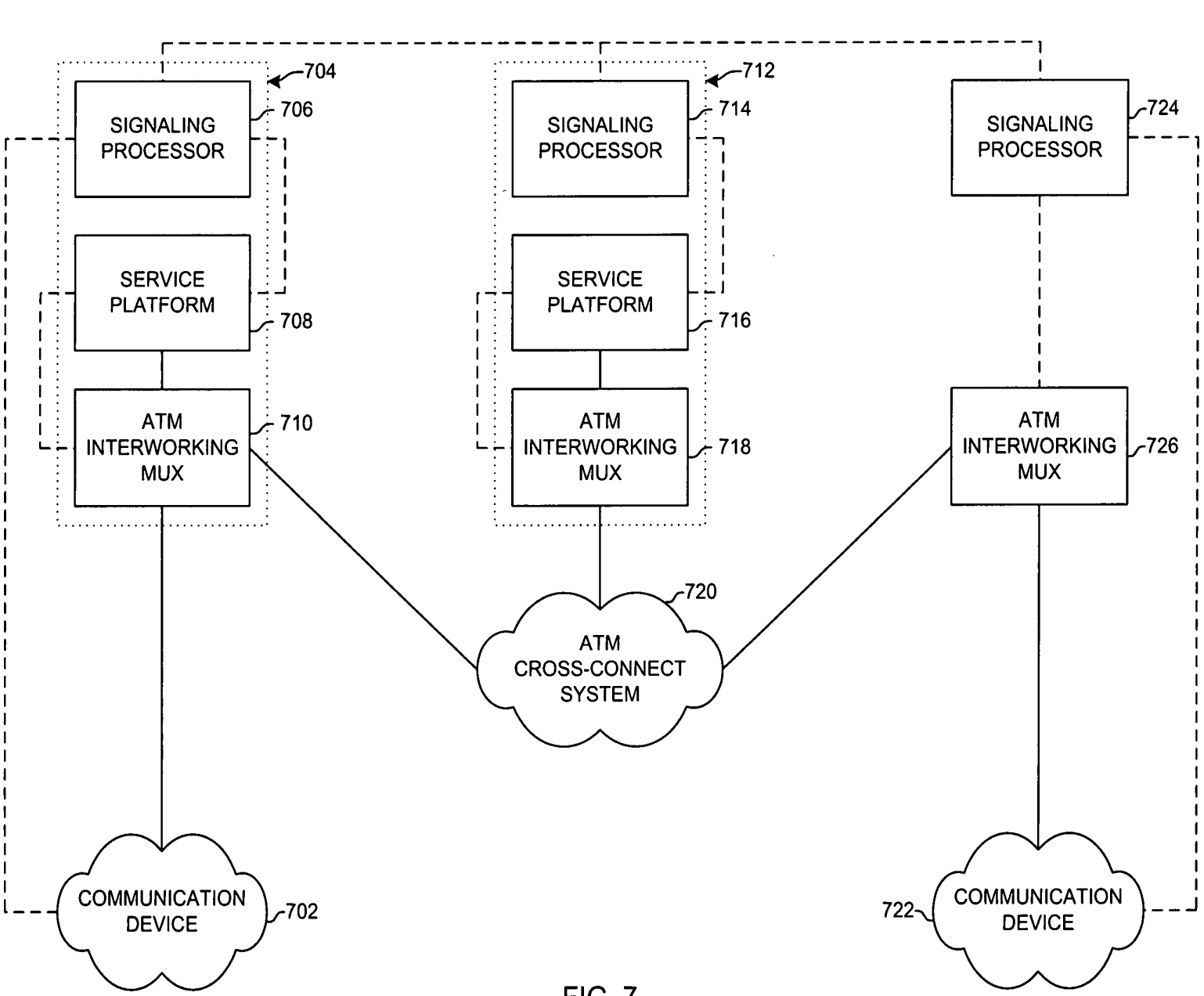
704
SIGNALING PROCESSOR
706
SERVICE PLATFORM
708
ATM INTERWORKING MUX
710
712
SIGNALING PROCESSOR
714
SERVICE PLATFORM
716
ATM INTERWORKING MUX
718
724
SIGNALING PROCESSOR
ATM INTERWORKING MUX
726
720
ATM CROSS-CONNECT SYSTEM
COMMUNICATION DEVICE
702
722
COMMUNICATION DEVICE

FIG. 7

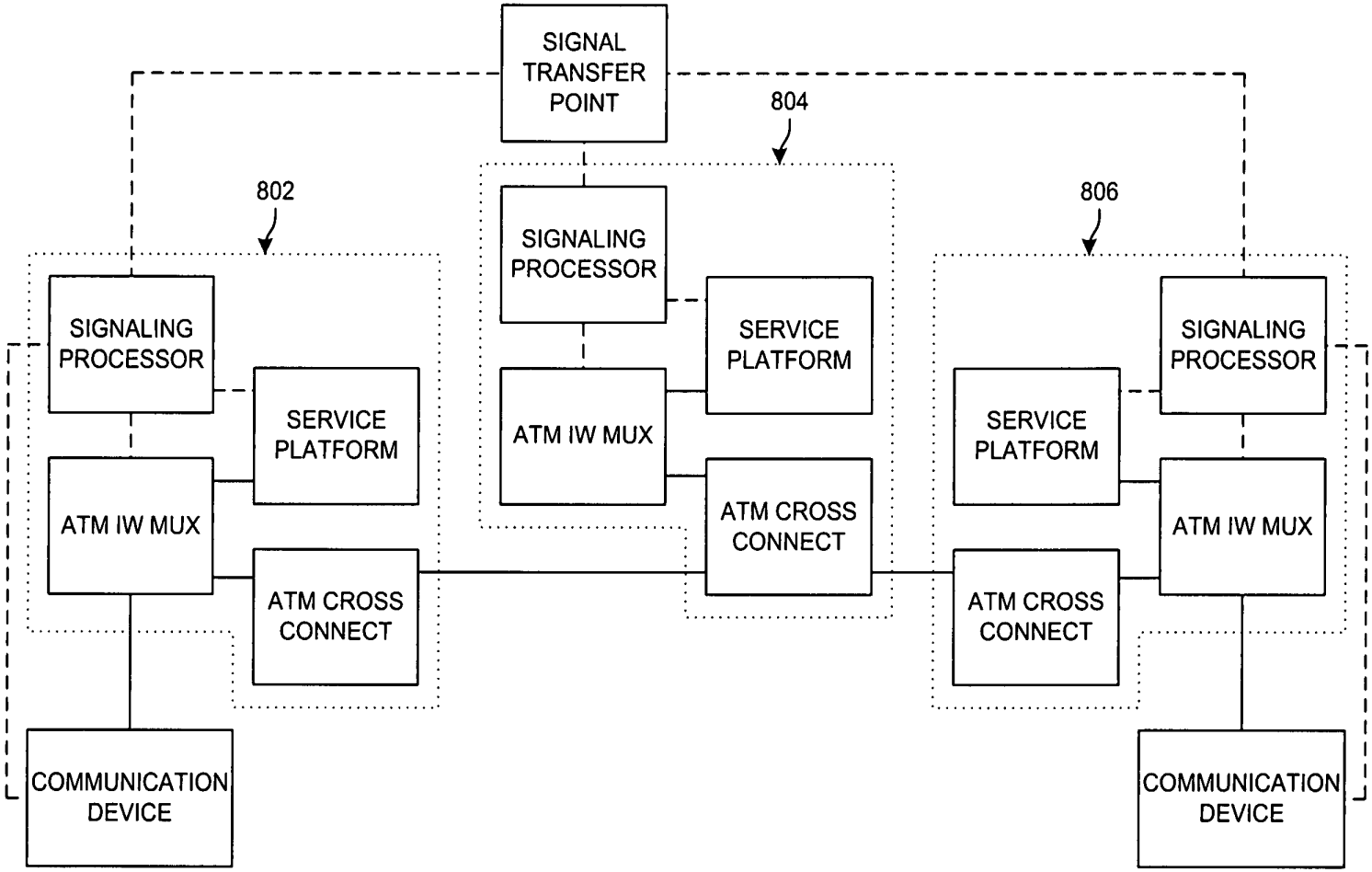
SIGNAL TRANSFER POINT
804
802
806
SIGNALING PROCESSOR
SIGNALING PROCESSOR
SIGNALING PROCESSOR
SERVICE PLATFORM
SERVICE PLATFORM
SERVICE PLATFORM
ATM IW MUX
ATM IW MUX
ATM IW MUX
ATM CROSS CONNECT
ATM CROSS CONNECT
ATM CROSS CONNECT
COMMUNICATION DEVICE
COMMUNICATION DEVICE

FIG. 8

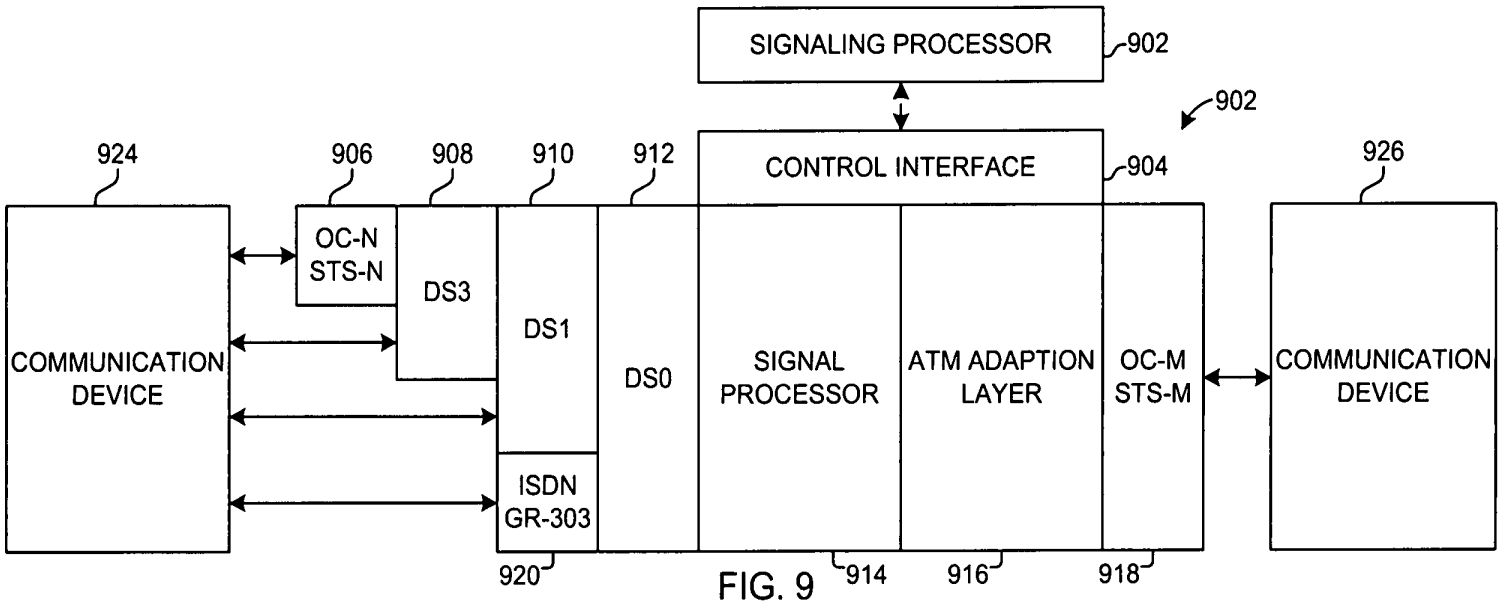
SIGNALING PROCESSOR
902
902
924
906
908
910
912
CONTROL INTERFACE
904
926
OC-N
STS-N
DS3
DS1
DS0
SIGNAL
PROCESSOR
ATM ADAPTION
LAYER
OC-M
STS-M
COMMUNICATION
DEVICE
COMMUNICATION
DEVICE
ISDN
GR-303
920
914
916
918

FIG. 9

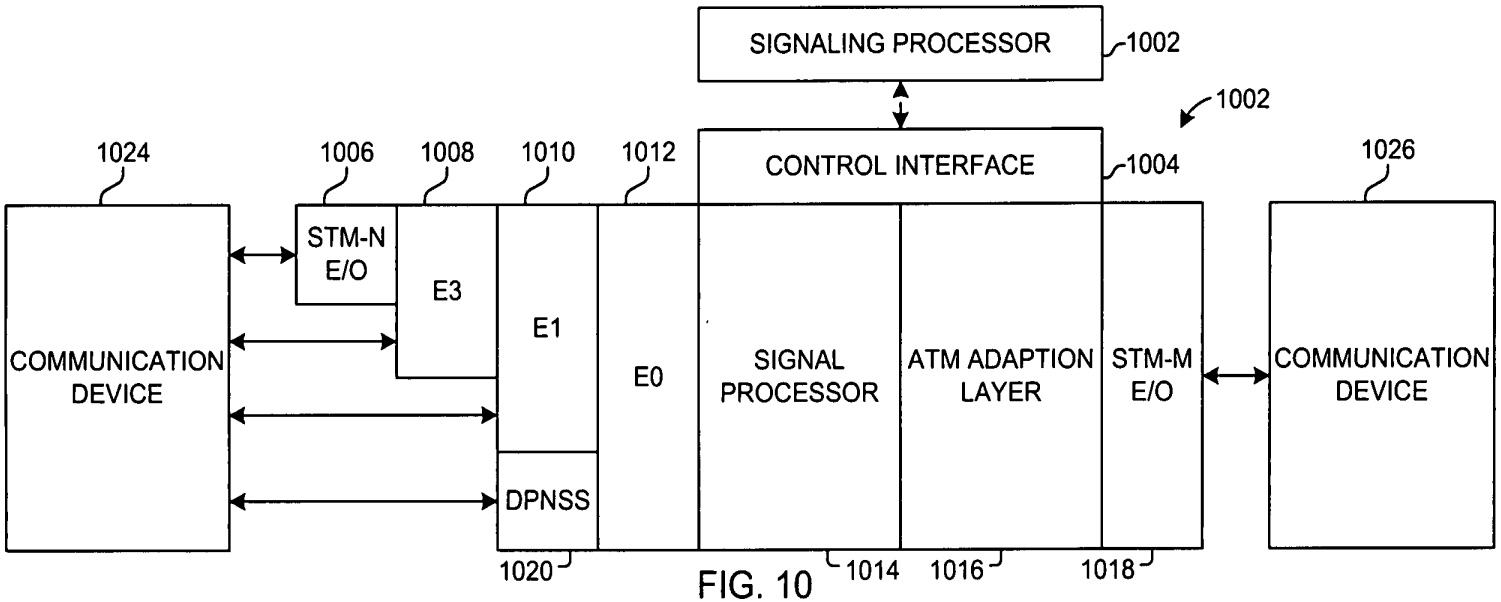
SIGNALING PROCESSOR
1002
1002
1024
1006
1008
1010
1012
CONTROL INTERFACE
1004
1026
STM-N
E/O
E3
E1
E0
SIGNAL
PROCESSOR
ATM ADAPTION
LAYER
STM-M
E/O
COMMUNICATION
DEVICE
COMMUNICATION
DEVICE
DPNSS
1020
1014
1016
1018

FIG. 10

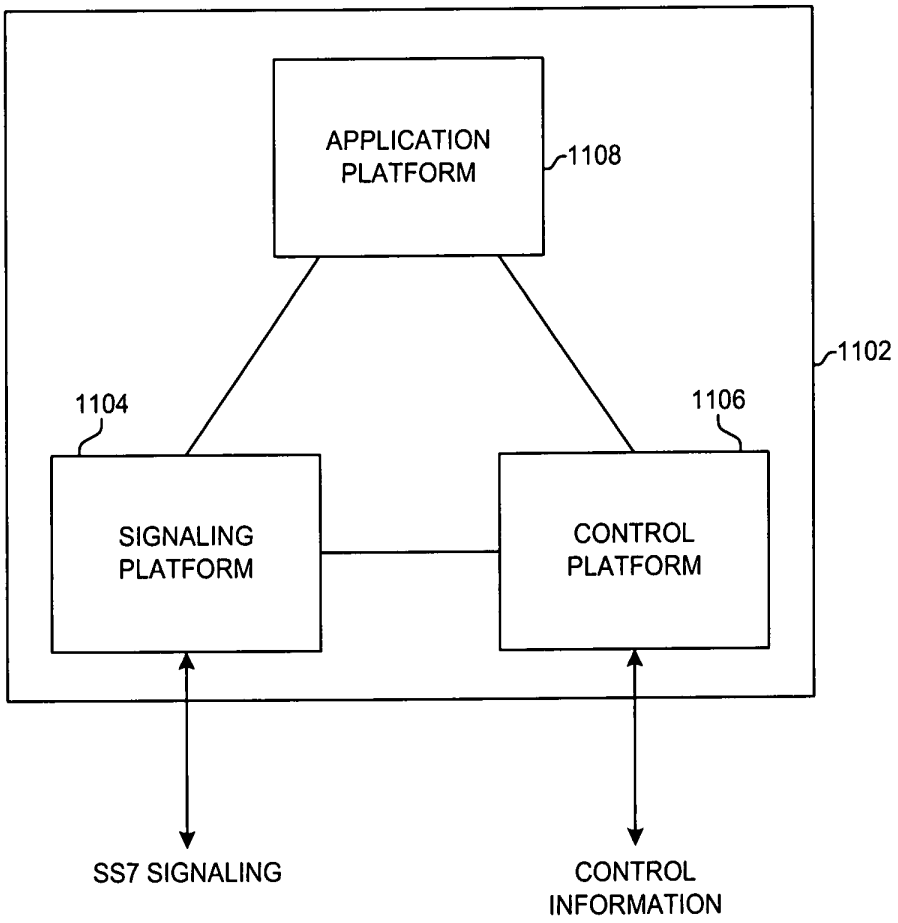
APPLICATION PLATFORM
1108
1102
1104
1106
SIGNALING PLATFORM
CONTROL PLATFORM
SS7 SIGNALING
CONTROL INFORMATION

FIG. 11

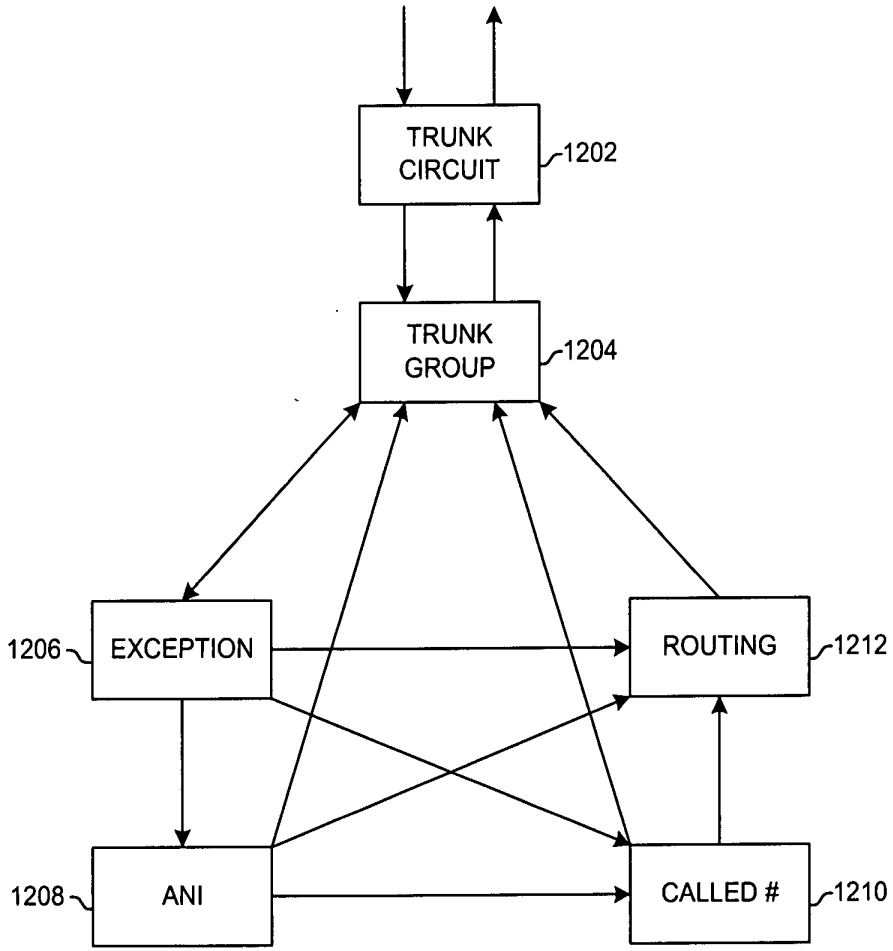
TRUNK CIRCUIT
1202
TRUNK GROUP
1204
1206
EXCEPTION
ROUTING
1212
1208
ANI
CALLED #
1210

FIG. 12

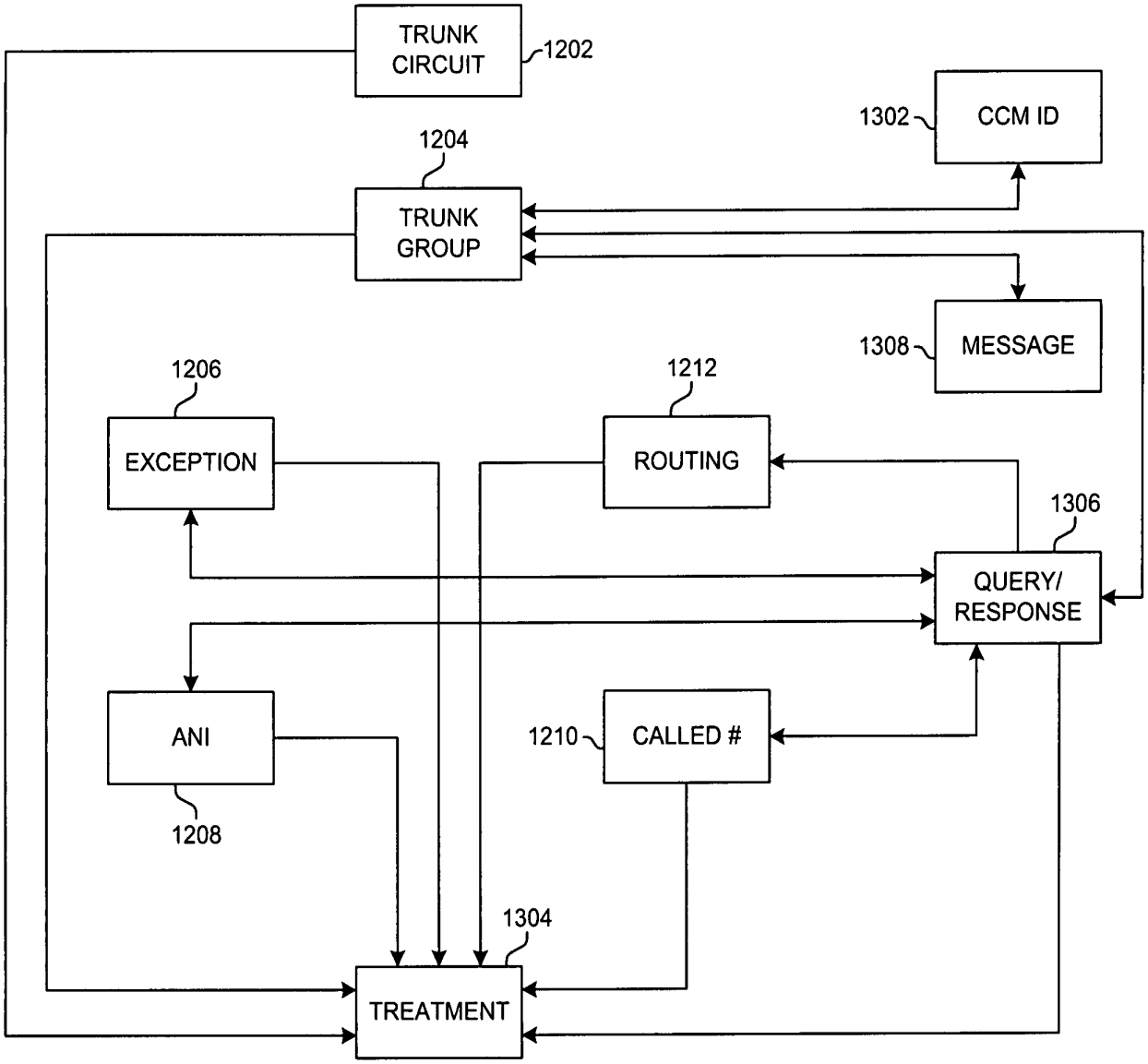
TRUNK CIRCUIT
1202
1302
CCM ID
1204
TRUNK GROUP
1308
MESSAGE
1206
1212
EXCEPTION
ROUTING
1306
QUERY/ RESPONSE
ANI
1210
CALLED #
1208
1304
TREATMENT

FIG. 13

ASSOCIATED POINT CODE	CIC	VP	VC	TRUNK GROUP NUMBER	GROUP MEMBER NUMBER	HARDWARE IDENTIFIER	ECHO CANCELER	ECHO CONTROL	SATELLITE INDICATOR	CIRCUIT STATUS	CIRCUIT STATE	TIME/ DATE

FIG. 14

TRUNK GROUP NUMBER	GLARE RESOLUTION	CONTINUITY CONTROL	CLLI	SATELLITE TRUNK GROUP	SERVICE INDICATOR	ASSOCIATED NPA	SELECTION SEQUENCE	HOP COUNTER	ACC ACTIVE	OMI	NEXT FUNCTION	INDEX

FIG. 15

EXCEPTION TABLE INDEX	CARRIER SELECTION IDENTIFICATION	CARRIER IDENTIFICATION	CALLED PARTY			NEXT FUNCTION	INDEX
			NATURE OF ADDRESS	DIGITS FROM	DIGITS TO		

FIG. 16

ANI TABLE INDEX	CALLING PARTY CATEGORY	NATURE OF ADDRESS	CALLING PARTY/CHARGE NUMBER			ORIGINATING LINE INFORMATION	NEXT FUNCTION	NEXT INDEX
			DIGITS FROM	DIGITS TO	DATA			

FIG. 17

CALLED NUMBER TABLE INDEX	NATURE OF ADDRESS	DIGITS FROM	DIGITS TO	NEXT FUNCTION	NEXT INDEX

FIG. 18

ROUTING TABLE INDEX	TRANSIT NETWORK SELECTION			CIRCUIT CODE	NEXT FUNCTION #1	INDEX #1	NEXT FUNCTION #2	INDEX #2	NEXT FUNCTION #3	INDEX #3
	NETWORK IDENTIFICATION PLAN	DIGITS FROM	DIGITS TO							

FIG. 19.

INDEX	MESSAGE RECEIVED CAUSE VALUE	GENERAL LOCATION	CODING STANDARD	CAUSE VALUE	NEXT FUNCTION	INDEX

FIG. 20

MESSAGE TYPE	PARAMETERS	INDEX #1	INDEX #....	INDEX #N
ADDRESS COMPLETE	BACKWARD CALL INDICATOR			
	ACCESS TRANSPORT			
	CAUSE INDICATOR			
	OPTIONAL BACKWARD CALL INDICATORS			
	OPTIONAL "FE" INDICATOR			
ANSWER	ACCESS TRANSPORT			
	BACKWARD CALL INDICATOR			
CALL PROGRESS	EVENT INFORMATION			
	BACKWARD CALL INDICATOR			
	ACCESS TRANSPORT			
	CAUSE INDICATOR			
	OPTIONAL BACKWARD CALL INDICATOR			
CIRCUIT RESERVATION	NATURE OF CONNECTION INDICATOR			
CIRCUIT RESERVATION ACK	N/A			
CONFUSION	N/A			
CONTINUITY	CONTINUITY INDICATOR			
EXIT	OUTGOING TRUNK GROUP NUMBER			
INFORMATION	ALL PARAMETERS			
INFORMATION REQUEST	ALL PARAMETERS			
INITIAL ADDRESS	NATURE OF CONNECTION INDICATOR			
	FORWARD CALL INDICATOR			
	CALLING PARTY'S CATEGORY			
	USER SERVICE INFORMATION			
	CALLED PARTY NUMBER			
	ACCESS TRANSPORT			
	CALLING PARTY NUMBER			
	CARRIER IDENTIFICATION			
	CARRIER SELECTION INFORMATION			
	CHARGE NUMBER			
	GENERIC ADDRESS			
	ORIGINATING LINE INFORMATION			
	ORIGINAL CALLED NUMBER			
	REDIRECTING NUMBER			
	SERVICE CODE			
	TRANSIT NETWORK SELECTION			
	HOP COUNTER			
PASS ALONG	ALL PARAMETERS			
RELEASE	CAUSE INDICATOR			
	ACCESS TRANSPORT			
	AUTOMATIC CONGESTION CONTROL			
RELEASE COMPLETE	N/A			
RESUME	SUSPEND/RESUME INDICATOR			
SUSPEND	SUSPEND/RESUME INDICATOR			

FIG. 21